

ABSTRACT

A differentiator for a vending machine includes a drive motor which drives a threaded shaft. A carrier with a port adapted to receive the threaded shaft defines the base of the differentiator with the head of the differentiator pivotally mounted on the base. A biasing spring between the base and the head urges the head into an angular orientation. A surface which supports a stack of items marketed by the vending machine provides an environment in which the differentiator works. The differentiator is mounted under the support surface. The support surface includes a slot therein. The differentiator is mounted so that differentiator head, on the differentiator base is positioned in the slot of the support surface. One end of the angularly oriented head extends above the support surface, through the slot and, when carried forward by the base, separates an item from the stack of items supported on the support surface. When carried backward by the base, the angular orientation of the head is overcome by items in the stack, which overcome the bias and flatten the position of the head. Escape, by the head, from the influence of the stack, urges the head to an angular orientation.